JOSEF A. KOHEN, BREAKWATER TRADING LLC, and RICHARD HERSHEY,	) ) )
Paintiffs,	<i>)</i> )
v.	<ul> <li>No. 05 C 4681</li> <li>Judge Ronald A. Guzman</li> <li>Magistrate Michael T. Mason</li> </ul>
PACIFIC INVESTMENT MANAGEMENT COMPANY LLC, and PIMCO FUNDS,	) )
Defendants.	<i>)</i> ) )

## AFFIDAVIT OF DR. CRAIG PIRRONG

- I have been retained by Plaintiffs as an expert in this matter, and as such, I have submitted two expert reports and deposition testimony. I have reviewed Defendants' Statement of Uncontested Facts, including Facts 24, and 60-63. 1 submit this affidavit in response to those "Facts."
- 2. After additional analysis of the issues raised by Defendants' "Fact" 24, I conclude that it is not possible to quantify separately the contribution to total artificiality of each of PIMCO's manipulative acts. PIMCO's myriad manipulative acts were interconnected and complementary. As a result of this interconnectedness and complementarity, the impact on artificiality of any specific manipulative act depended on PIMCO's other acts, and its positions in various instruments. As a specific example, whereas purchases of the CTD could have been a relatively benign act in the absence of a large long futures position, such trades were

Futures contract. In my opinion, it was the <u>combination</u> of the immense long futures position, PIMCO's purchases of the CTD, and its other conduct, rather than any single act in isolation, that caused the statistically significant association between PIMCO's trades in the CTD and changes in artificiality documented in my Rebuttal Report. Hence, it is not possible to parse the impact on artificiality between pre-existing futures positions and CTD trades (or other manipulative acts) during the Class Period.

- 3. Indeed, in a scheme to manipulate, one act takes significance from all others in combination. Since all of PIMCO's acts and positions were interconnected and highly complementary, in these circumstances, it is not possible to determine in a scientifically rigorous, non-arbitrary way, the contribution of any isolated act separately to the total artificiality caused by Defendants' manipulative acts.
- 4. With respect to Defendants' "Facts" 60-63, in my second deposition, I testified that I have reviewed the CFTC's Commitment of Traders Reports ("COT") for the Ten Year Treasury Note Futures contract for the Class Period (Pitrong Second Dep. 84:11-86:2). These reports and the totality of the record indicate that it was extremely unlikely that any other trader in the market held a long position anywhere near as large as PIMCO's.
- 5. As I testified, the COT discloses the share of positions (aggregated across all contract months) held by the four and eight largest traders on a gross and a net basis.

Treasury Note Futures. The four largest gross longs held 41.4 percent of the total open interest in Ten Year Treasury Note Futures. Thus, on this date, PIMCO held 42 percent of the contracts held by the four largest gross longs. This implies that on a strict averaging basis, PIMCO's position was more than twice as large as the average position held by the remaining three largest gross longs.

- 7. On 10 May, PIMCO's gross long June position represented 43 percent of the contracts held by the four largest gross longs. Again, therefore, its position was more than twice as large as the average position held by the remaining three largest gross longs. The same was true on 17 May.
- 8. With respect to net positions, on 3 May, PIMCO's net position in the June contract was 16 percent of total open interest in Ten Year Treasury Note Futures, and the four largest net longs accounted for 37.7 percent of total open interest. Thus, PIMCO's net June position represented 43 percent of the total held by the four largest net longs, and as a result, PIMCO's net June position was 2.25 times as large as the average position held by the remaining three largest longs. On 10 May, PIMCO's net June position represented 45.5 percent of the total held by the four largest net longs, and hence its position was 2.5 times as large as the average position held by the other three largest net longs. On 17 May, PIMCO's net June position was 47 percent of the total held by the four largest net longs. As a consequence, its position was 2.65 times as large as the average position held by the remaining three largest net longs.

Treasury Note future as PIMCO. It is necessarily true that the average of the third and fourth largest long positions exceeds the average of the fifth, sixth, seventh, and eighth largest long positions. The COT permits calculation of the average position held by the fifth-through-eighth largest traders (because it reports the four long trader and eight long trader concentration ratios), and if one makes an assumption about the size of the largest position other than PIMCO's, it is possible to calculate the average position held by the third and fourth largest longs.

10. If there had been another long as large as PIMCO on 10 May and 17 May, the average position held by the third and fourth largest longs on these dates would have been smaller than the average position held by the fifth-through-eighth largest longs. This is true for both gross and net positions. This is mathematically impossible. Thus, I can rule out the possibility that there was another long as large, or larger, than PIMCO on these dates.

I hereby declare under penalty of perjury that the foregoing is true and correct.

Dr. Craig Pirrong

28 November, 2007

28 November 2007

## CERTIFICATE OF SERVICE BY ELECTRONIC MEANS

I, Marvin A. Miller, one of the attorneys for plaintiffs, hereby certify that on November 29, 2007, service of the foregoing document was accomplished pursuant to ECF as to Filing Users and I shall comply with LR 5.5 as to any party who is not a Filing User or represented by a Filing User.

/s/ Marvin A. Miller
Marvin A. Miller